

Patent

-Attorney's Docket No. 003300-903

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Patent Application of:		
Per ANTONSSON et al.	Group Art Unit: 1648	
Serial No.: 10/048,016	Examiner: Ali R. Salimi	RECEIVED
Filed: January 28, 2002	Confirmation No.: 1277	MAR 2 7 2003
For: VACCINE		TECH CENTER 1600/2900

## RESPONSE TO RESTRICTION REQUIREMENT AND ELECTION OF SPECIES

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In response to the Official Action issued February 27, 2003, Applicants hereby elect, with traverse, Group II, which includes claims 1, 3, 4 and 5, drawn to modified fusion protein papillomavirus L1 with a T cell epitope. In addition, Applicants elect, with traverse, the "antigen comprising tumor" species for examination on the merits. Claims readable on this elected species include dependent claim 5.

The Restriction Requirement is traversed because it is believed that the nine groups of claims set up by the Examiner are drawn to sufficiently interrelated inventions to warrant examination thereof in a single application.

The instant application is a national phase application of an International PCT Application. Therefore, 37 C.F.R. §§ 1.499, 1.475, 1.143 and 1.144 apply. Restriction practice under 35 U.S.C. § 121 and its associated rules, do not apply. See M.P.E.P. § 1895.01. Unity of invention is fulfilled only when there is a technical relationship among

those inventions involving one or more of the same or corresponding special technical features. 37 C.F.R. § 1.475. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. *Id*.

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The present claims are directed to the same technical feature, as they all are directed to modified L1 papillomavirus in fusion with a peptide. The peptide may comprise one or more peptide epitopes. For example, the claims of Group II recite a modified L1 papillomavirus in fusion with a peptide comprising one or more peptide epitopes, being recognized by T-cells. The claims of Group III recite a modified L1 papillomavirus in fusion with a peptide comprising one or more peptide epitopes, being recognized by B-cells. Both of these epitopes consist of short peptides of equal size. Thus, Applicants request that all nine groups be rejoined. A complete search for all groups of claims would be coextensive such that search and examination of the entire application can be made without serious burden on the U.S. Patent and Trademark Office. In the interest of expediting prosecution, Applicants invite the Examiner to consider the rejoinder of Groups II and III Groups, if all nine Groups are not rejoined.

As Applicants have traversed the rejection, Applicants note for the record the following regarding the instant restriction requirement. Under M.P.E.P. § 803, a restriction is proper if the subject matter can be restricted into one of two or more claimed

inventions, and these inventions are either independent (M.P.E.P. § 806.04) or distinct (M.P.E.P. § 806.05). However, the second element for a restriction requirement to be proper is that if the search and examination of an entire application can be made without serious burden, the examiner *must* examine it on the merits, even though it includes claims to independent and distinct inventions. Furthermore, the Office has not set forth an explanation of how a search of the claimed invention would be burdensome. Accordingly, Applicants assert that a proper restriction under M.P.E.P. § 803 has not been set forth with regard to the originally presented claims. The restriction should be withdrawn or, at the very least, reconsidered.

The Office Action states that if Group II is elected, Applicants must elect a species to which claims will be restricted if no generic claim is held to be allowable.

Applicants disagree regarding the distinctness of the species for election. All six species relate to the same technical feature in that they all relate to modified L1 papillomavirus in fusion with a peptide. The peptide may comprise one or more peptide epitopes. Furthermore, Applicants note that an epitope is the part of an antigenic molecule to which the T-cell receptor responds. Thus, regardless of whether the T-cell epitope is derived from a tumor, a parasite, a bacteria, a virus, an auto-antigen or a polynucleotide, the T-cell epitope of the claimed invention is removed and antibodies produced.

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If the Examiner has any questions concerning the response or the application in general, the Examiner is invited to contact the undersigned so as to expedite prosecution.

Respectfully submitted,

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